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Substantiate for form 1449/PTO  <h2 style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center;"><i>(Use as many sheets as necessary)</i></p>				<p style="text-align: right;"><b>Complete If Known</b></p> Application Number 10/587,512 Filing Date November 8, 2007 First Named Inventor Justin Hanes Art Unit 1632 Examiner Name M. K. Sgagias Attorney Docket Number JHUC-P01-021	
Sheet	1	of	4		

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.*	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code * (if known)			
	AB*	US-7,163,697	01-16-2007	Hanes et al.	
	AC*	US-5,985,309	11-16-1999	Edwards et al.	
	AD*	US-5,916,596	06-29-1999	Desai et al.	
	AE*	US-5,718,921	02-17-1998	Malthowitz et al.	
	AF*	US-5,578,325	11-26-1996	Domb et al.	
	AG*	US-4,999,417	03-12-1991	Domb	
	AH*	US-4,906,474	03-06-1990	Langer et al.	
	AI*	US-4,868,274	09-19-1989	Gupta et al.	
	AJ*	US-4,792,598	12-20-1988	Ziegast	
	AK*	US-4,789,724	12-06-1988	Domb et al.	
	AL*	US-4,757,128	07-12-1988	Domb et al.	
	AM*	US-20080166414	07-10-2008	Hanes et al.	
	AN*	US-20060083781	04-20-2006	Shastri et al.	
	AO*	US-20050101676	05-12-2005	Fahl et al.	
	AP*	US-20040258763	12-23-2004	Bell	
	AQ*	US-12/310,751	Filed 3/6/09	Hanes et al.	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	Footnote
		Country Code <sup>2</sup> Number <sup>3</sup> Kind Code <sup>4</sup> (if known)	MM-DD-YYYY			
	BA	EP-0 692 510	12-22-2004	Mass. Inst. of Technology		
	BB	WO-02/053189	07-11-2002	Timmerman, B.		
	BC	WO-2005/072710	08-11-2005	Johns Hopkins University		
	BD	WO-2007/133808	11-22-2007	Liquidia Technologies, Inc.		
	BE	WO-98/29097	07-09-1998	Quadrant Holdings Cambridge Ltd.		
	BF	WO-99/01498	01-14-1999	Danbiosyst UK Limited		
	BG	WO-95/22318	08-24-1995	Vernon et al.		
	BH	WO-95/03356	02-02-1995	Mass. Inst. of Technology		

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\* EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609 Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant \* CITE NO Those application(s) which are marked with an single asterisk (\*) need not be cited No are not supplied (under 37 CFR 1.98(a)(2)(iii)) because the publication was filed after year 2000, 2003 or is available in the IFW Applicant's unique citation designation number (optional) See Kinds/Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 301-04 Enter office that issued the patent or published the document, e.g., "US Patents," "European Patents," etc. Indicate the year of the filing of the invention; mark precede the serial number of the patent document Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 possible \* Applicant is to place a check mark here if English language Translation is attached

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NON PATENT LITERATURE DOCUMENTS				
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	CH	Albertsson et al., Characterization and Degradation of Aliphatic Polyamides. British Polymer J. 23, 205-12 (1990)		
	CI	Brorson et al., Mutational Analysis of Avidity and Fine Specificity of Anti-Levan Antibodies. J. Immunol. Vol. 163, pages 6694-6701 (1999)		
	CJ	Brummell et al., Probing the combining site of an anti-carbohydrate antibody by saturation-mutagenesis: role of the heavy-chain CDR3 residues. Biochemistry Vol. 32 pages 1180-1187 (1993)		
	CK	Burks et al., In vitro scanning saturation mutagenesis of an antibody binding pocket. PNAS Vol. 94, pages 412-417 (1997)		
	CL	Chan, et al. Phase behavior and miscibility in blends of poly(sebacic anhydride)/ poly(ethylene glycol). Biomaterials 23, 2353-58 (2002)		
	CM	Colman, Effects of amino acid sequence changes on antibody-antigen interactions. Research in Immunol. Vol. 145 pages 33-36 (1994)		
	CN	Dawson et al., Enhanced Viscoelasticity of Human Cystic Fibrotic Sputum Correlates with Increasing Microheterogeneity in Particle Transport. The Journal of Biological Chemistry. Vol. 278 pages 50393-50401 (2003)		
	CO	Dufner et al., Harnessing phage and ribosome display for antibody optimisation. Trends Biotechnol. Vol. 24, No. 11, pages 523-529 (2006)		
	CP	Ehrhardt et al., Drug Absorption by the Respiratory Mucosa: Cell Culture Models and Participate Drug Carriers. Journal of Aerosol Medicine. Vol. 15, No. 2, pages 131-139 (2002)		

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<sup>2</sup>Applicant's unique citation designation number (optional) <sup>3</sup>Applicant to place a check mark here if English language Translation is attached

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	CQ	Jang et al., The structural basis for DNA binding by an anti-DNA autoantibody. <i>Molec. Immunol.</i> Vol. 35, pages 1207-1217 (1998)	
	CR	Jiang et al. Preparation, characterization and degradation characteristics of polyanhydrides containing poly(ethylene glycol). <i>Polym Int.</i> 48, 47-52 (1999)	
	CS	Jiang et al., Pulsatile protein release from a laminated device comprising of polyanhydrides and pH-sensitive complexes. <i>Int. J. Pharmaceutics</i> 194, 51-60 (2000)	
	CT	Kobayashi et al., Tryptophan H33 plays an important role in pyrimidine (6-4) pyrimidone photoproduct binding by a high-affinity antibody. <i>Protein Engineering</i> Vol. 12, pages 879-884 (1999)	
	CU	Lai et al., Rapid transport of large polymeric nanoparticles in fresh undiluted human mucus. <i>PNAS</i> Vol. 104, No. 5 pages 1482-1487 (2007)	
	CV	Lipman et al., Monoclonal Versus Polyclonal Antibodies: Distinguishing Characteristics, Applications, and Information Resources. <i>ILAR Journal</i> Vol. 46, No. 3, pages 258-268 (2005)	
	CW	Liyan, Q. et al. Compatibility and degradation of new polyphosphazene/polyanhydride blend. <i>Gaofenzi Xuebao</i> 5, 660-664 (2001), Chemical Abstracts Service, Accession No. 2001:817417.	
	CX	Peracchia, M. T. et al. PRG-coated nanospheres from amphiphilic diblock and multiblock copolymers: Investigation of their drug encapsulation and release characteristics. <i>J. Controlled Release</i> 46, 223-231 (1997).	
	CY	Qiu, L. Y. & Zhu, K. J. Design of a core-shelled polymer cylinder for potential programmable drug delivery. <i>Int. J. Pharm.</i> 219, 151-160 (2001).	

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	CZ	Rolland et al., Direct Fabrication and Harvesting of Monodisperse, Shape-Specific Nanobiomaterials. J. AM. Chem. Soc. Vol. 127, pages 10096-10100 (2005)	
	CA1	Shuai, X. et al. Synthesis and characterization of several degradable aliphatic polyanhydrides. J. Beijing Inst. Tech. 5, 130-136 (1996), Chemical Abstract Service, Accession No. 1997:364424.	
	CB1	Wu, C. et al. Novel Nanoparticles Formed via Self-Assembly of Poly(ethylene glycol- <i>b</i> -sebacic anhydride) and Their Degradation in Water. <i>Macromolecules</i> 33, 9040-9043 (2000).	

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